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Tong-Sok Kim

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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT

PAPER NUMBER

2419

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/529,564 | Applicant(s) KIM ET AL. | |
| | Examiner Andrew C. Lee | Art Unit 2419 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/19/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,8,10-12,15 and 17 is/are rejected.
- 7) ☒ Claim(s) 2,9,16,6,7,13,14,18,19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/19/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1 – 19 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bossemeyer et al. (US 20020037004 A1) in view of Sue (US 7310344 B1).

Regarding claims 1, 8, 15, Bossemeyer et al. disclose a home automation communication system, and method using advanced asymmetric digital subscriber line (ADSL) (*"home gateway system ...home automation", "ADSL"; Fig. 1, paras [0027], [0028], [0030], [0032]*), comprising: a home automation communication server for providing a home automation service (*"Home gateway system" interpreted as home automation communication server; Fig.1, para [0032]*); a home automation service channel means included in an ADSL terminal for transmitting/receiving a control signal data with home automation devices in wired or wireless communication mode using ADSL low rate signals (*"telephone functions connected to a variety of communication carriers" and "a plurality of digital derived telephone channels" interpreted as a home automation service channel means, "receive a cable television (satellite, XDSL, ADSL)*

Art Unit: 2419

signal", "a data channel of such an ADSL link"; para [0032], [0033] Fig. 15, para [0056]), except a home automation service control signal; and a home automation multiplexing means included in an ADSL accessing means for multiplexing control signal and data between the home communication server and the home automation service channel means ("element 124 multiplexer" ...and "transceiver" interpreted as a home automation multiplexing means included in an ADSL accessing means; Fig. 6, para [0041], Fig. 7, para. [0043]).

Bossemeyer et al. do not disclose explicitly a home automation service control signal.

Sue in the same field of endeavor teaches a home automation service control signal (*"control signal"; Abstract, Fig. 1, Fig. 2, col. 3, lines 26 – 33*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Bossemeyer et al. to include the features of a home automation service control signal as taught by Sue. One of ordinary skill in the art would be motivated to do so for providing a method and system for an instant messenger home automation system interface using a router (*as suggested by Sue., see col. 3, lines 4 – 5*).

4. Claims 3, 10, 17, 4, 11, 5, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bossemeyer et al. (US 20020037004 A1) in view of Eames (US 6208637 B1).

Regarding claims 3, 10, 17, Bossemeyer et al. disclose the system, method as recited in claimed wherein the home automation service multiplexing means (*"element*

Art Unit: 2419

124 multiplexer" ...and "transceiver" interpreted as a home automation multiplexing means included in an ADSL accessing means; Fig. 6, para [0041]) includes: a home automation service processing means connected to the home automation communication means for performing home automation service process and transmitting/receiving data with the home automation service channel means through the low rate frame accessing means ("telephone functions connected to a variety of communication carriers" interpreted as a home automation service processing means, and "Internet Service Provider" interpreted as home automation communication means an ADSL terminal; paragraph [0032], Fig. 15, paragraph [0056]).

Bossemeyer et al. do not disclose explicitly a low rate frame accessing means connected to a low rate processing unit of ADSL termination unit - central (ATU-C) for receiving and transferring low rate data.

Eames in the same field of endeavor teach a low rate frame accessing means connected to a low rate processing unit of ADSL termination unit - central (ATU-C) for receiving and transferring low rate data (*"an analog POTs linecard" interpreted as a low rate frame accessing means, and Host Digital Terminal (HDT) as ATU-C; Fig. 4, col. 6, lines 37 – 54*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Bossemeyer et al. to include the features of a low rate frame accessing means connected to a low rate processing unit of ADSL termination unit - central (ATU-C) for receiving and transferring low rate data as taught by Eames. One of ordinary skill in the art would be motivated to do so for

Art Unit: 2419

providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (as suggested by Eames, see col. 1, lines 19 – 21).

Regarding claims 4, 11, Bossemeyer et al. disclose the system as recited claimed wherein the advanced ADSL (“ADSL”; *para [0033]*).

Bossemeyer et al. do not disclose explicitly wherein the advanced ADSL includes a dual link discrete multitone (DLDMT) method.

Eames in the same field of endeavor teaches wherein the advanced ADSL includes a dual link discrete multitone (DLDMT) method (*the use of Discrete Multitone (DMT)*).... “*generating the POT’s signal externally and combining it with the ADSL signal*”; col. 10, lines 24 – 36).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Bossemeyer et al. to include the features of the system as recited claimed wherein the advanced ADSL includes a dual link discrete multitone (DLDMT) method as taught by Eames. One of ordinary skill in the art would be motivated to do so for providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (*as suggested by Eames, see col. 1, lines 19 – 21*).

Regarding claims 5, 12, Bossemeyer et al. disclose the system as recited in claimed wherein the advanced ADSL (“ADSL”; *para [0033]*).

Bossemeyer et al. do not disclose explicitly wherein the advanced ADSL includes an asynchronous transfer mode (ATM).

Eames in the same field of endeavor teaches wherein the advanced ADSL

Art Unit: 2419

includes an asynchronous transfer mode (ATM) (*"Asynchronous Transfer Mode (ATM)"*; *col. 1, lines 63 – 67, col. 2, lines 1 – 3*).

At time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the teachings of Suzuki et al. to include the features of wherein the advanced ADSL includes an asynchronous transfer mode (ATM) as taught by Chiu et al. One of ordinary skill in the art would be motivated to do so for providing a method and apparatus for generation of analog telephone signals in digital subscriber loop access (*as suggested by Eames, see col. 1, lines 19 – 21*).

Allowable Subject Matter

5. Claims 2, 9, 16, 6, 7, 13, 14, 18, 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 11/18/2008 with respect to claims 1 – 19 have been fully considered but they are not persuasive.

Applicant argues reference Bossemeyer does not disclose, teach or suggest "a home automation service channel means included in an ADSL terminal for transmitting/receiving a home automation service control signal and data with home automation devices in wired or wireless communication mode using ADSL low rate signals." Examiner respectfully disagrees.

Examiner contends the combined system of references Bossemeyer et al. and Sue (US 7310344 B1) teaches "a home automation service channel means included in an ADSL terminal for transmitting/receiving a home automation service control signal and data with home automation devices in wired or wireless communication mode using ADSL low rate signals. Examiner interpreted ADSL low rate signals as to receive a cable television (satellite, XDSL, ADSL) signal and provides a plurality of digital derived channels and a data channel of such as ADSL link (see Bossemeyer et al., paras. [0032], [0033], and interpreted transmitting/receiving a home automation service control signal as control signals can be transmitted among the appliances in accordance with a standardized home automation interface, see reference Sue, Abstract, and col. 3, lines 26 - 33.

Regarding claims 2, 9, and 16, Applicant further argues "Moreover, the examiner alleges that the Eames "ATM framer" corresponds to a HAS framer and the "DMT processor" corresponds to a HAS agent. Referring to Fig. 17 and Col. 17, lines 25-43 of Eames, there is no description of the function of the ATM framer, and the described DMT processor 1700 supports both receive and transmit functions including coding and decoding, equalization, mapping of DMT carriers, ADSL framing and deframing, and ATM cell specific deframing. Applicant's arguments are persuasive. Hence claims 2, 9, and 16 the rejections under 35 U.S.C. 103(a) are withdrawn.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Richardson et al. (US 7203187 B1).
- b) Pitsoulakis (US 7092375 B2).
- c) Czerwec et al. (US 6314102 B1).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571)272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

Art Unit: 2419

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C Lee/
Examiner, Art Unit 2419
<3/25/2009::2Qy09>

/Edan Orgad/
Supervisory Patent Examiner, Art Unit 2419